

KAVERZNEVA, Ye.D.

ZELINSKIY, Nikolay Dmitriyevich, 1861-1953 [deceased] KAZANSKIY, B.A., akademik; BALANDIN, A.A., akademik; KOCHESHKOV, K.A.; SHUYKIN, N.I.; KAVERZNEVA, Ye.D., doktor khimicheskikh nauk; LEVINA, R.Ya., doktor khimicheskikh nauk; PLATE, A.F., doktor khimicheskikh nauk; HUBINSSTEYN, A.M., doktor khimicheskikh nauk; YUR'YEV, Yu.K., doktor khimicheskikh nauk; KISALEVA, A.A., tekhnicheskiy redaktor.

[Collected works] Sobranie trudov, Moskva, Izd-vo Akademii nauk SSSR.  
Vol. 2. 1955. 743 p. (MLRA 8:11)

1. Chlen-korrespondent AN SSSR(for Kocheshkov and Shuykin)  
(Hydrocarbons) (Petroleum)

KAVERZNEVA, Ye.D.; KIST', S.A.

Effect of the chemical composition of cellulose oxidized by nitrogen dioxide on its chemical properties. Soob.o nauch.rab.chl.VKHO  
no.3:13-17 '55. (MIRA 10:10)  
(Cellulose) (Nitrogen oxides)

KAVERZNEVA, YE. D.

USSR/Chemical Technology - Chemical Products and Their Application. General Questions, I-1

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 62053

Author: Nazarov, I. N., Kaverzneva, Ye. D.

Institution: None

Title: Twentieth-Eighth International Congress of Industrial Chemistry

Original  
Periodical: Khim. nauka i prom-st', 1956, 1, No 1, 101-103

Abstract: Review of papers presented at the congress in Madrid and particularly of papers concerned with investigations and utilization of natural and agricultural resources of Spain. Also is presented a review of the state of Spanish chemical industry.

Card 1/1

"APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000721210018-9

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000721210018-9"

KAVERZNEVA, Ye. D.

USSR/Chemistry of High Molecular Substances.

F

Abs Jeur: Ref Zhur - Khimiya, No. 8, 1957, 27081.

Author : Kaverzneva, Ye.D., Ivanov, V.I.,  
Saleva, A.S.; Klist', S.A.

Inst : Academy of Sciences of USSR. Inst Org. Chem. N.D. Zelinsky  
Title : Chemical Conversions of Cellulose Macromolecule  
under Influence of Oxidizers. Report 9. Chemi-  
cal Conversions at Oxidation of Cellulose with  
Nitrogen Peroxide. Report 10. Oxidation of Low  
Molecular Compounds Containing Hydroxyls with  
Nitrogen Peroxide. Report 11. To The Question  
of Chemical Instability of Celluloses Oxidized  
with Nitrogen Peroxide.

Orig Pub: Izv. AN SSSR, Otd. khim. n., 1956, No. 3, 358 -  
367; No. 5, 604 - 614.

Abstract: 9. The chemical conversion of cellulose (I)

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..... common COOH groups,  $\alpha$ -oxyketone groups,  
groupations of carbonate esters and of N-nitro-  
ester groups. It was shown that the action of  
 $\text{NO}_2$  on I was not a specific reaction of oxida-  
tion of initial OH-s, but was always accom-

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because the present COOH groups had been formed  
not only at the C<sub>6</sub>-atoms of carbon, but also  
in other places of the pyran cycle with its

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USSR/Chemistry of High Molecular Substances.

F

Abs Jour: Ref Zhur - Khimiya, No. 8, 1957, 27081.

oxidation of isopropyl alcohol (II), ethyl-  
eneglycol, 1,2-propanediol (III) and methyl-  
glucoside (IV) in  $\text{CCl}_4$  at about  $20^\circ$  was carried  
out. After the oxidation, the solution in  $\text{CCl}_4$   
was treated with water and both the layers were  
investigated separately. The aqueous layer con-  
tained the oxidation products of the used al-  
cohols, and their nitroesters were detected  
in  $\text{CCl}_4$ . Nitroester derivatives were found  
in the aqueous layer at the experiments with  
IV. Acetone and  $\text{NO}_2$  are forming at the oxida-  
tion of II, and oxyacetone and pyroracemic  
acids were separated at the oxidation of III,  
but the detection of lactic acid did not suc-  
ceed, which indicated a greater speed of oxida-  
tion of the secondary OH groups as compared

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APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721210018-9"

USSR/Chemistry of High Molecular Substances.

Abs Jour: Ref Zhur - Khimiya, No. 8, 1957, 27081.

with the initial ones. At the oxidation of IV,  
some interaction of the secondary OH groups took  
place together with the basic trend of oxidation  
of the initial OH groups. After the separation  
of the solution in  $\text{CCl}_4$  from the aqueous solu-  
tion and treatment with alkali at about  $20^\circ$ , the  
formation of  $\text{NO}_2$  with a simultaneous appearance  
of new quantities of carbonyl derivatives of the  
used alcohols was revealed. These facts confirm  
that the mechanism of alcohol oxidation with  $\text{NO}_2$   
is working through the stage of formation of  
nitroesters.

11. The causes of the chemical instability of  
exycelluloses (V), prepared by the action of  $\text{NO}_2$   
on cotton cellulose, were studied. V-s dissociate

Card 5/8

KAVERZHEVA, Ye.D.; IVANOV, V.I.; SALOVA, A.S.

Chemical conversions of cellulose macromolecules caused by oxidizers. Part 10. Oxidation of low molecular weight compounds containing a hydroxyl group by nitrogen dioxide. Izv.AN SSSR, Otd. khim.nauk no.4:482-490 Ap '56. (MLRA 9:8)

1. Institut organicheskoy khimii imeni N.D. Zelinskogo Akademii nauk SSSR.  
(Nitrogen oxides) (Carbohydrates) (Oxidation)

KAVERZNEVA, Ye.D.; KIST', S.A.

Chemical conversions of the cellulose macromolecule by oxidizers.  
Part II. Causes of the chemical instability of cellulose oxidized  
by nitrogen dioxide. Izv.AN SSSR.Otd.khim.nauk no.5:604-614 My  
'56. (MIRA 9:9)

1.Institut organicheskoy khimii imeni N.D.Zelinskogo Akademii  
nauk SSSR.  
(Cellulose) (Oxidation)

KAVEEZNEVA, Ye.D., doktor khimicheskikh nauk; LEPESHKOV, I.N., doktor khimicheskikh nauk.

At the 28th International Congress on Industrial Chemistry in  
Madrid. Vest.AN SSSR 26 no.5:64-68 My '56. (MLRA 9:8)  
(Madrid--Chemistry, Technical--Congresses)

KAVERZNEVA, YE. D.

Category: USSR/General Biology. General Physiology, Biochemistry  
and Biophysics.

B-1

Abs Jour: Referat Zh.-Biol., No 6, 25 March, 1957, 21426

Author : Kaverzneva, E.D.

Inst : not given

Title : Unsolved problems of protein structure.

Orig Pub: Vestn. AN SSSR, 1956<sup>26</sup>, No 8, 15-21

Abstract: A brief review of the basic problems in protein chemistry and its contemporary achievements. The importance of protein to theoretical and applied biology, as well as to industry, is described. Successes are noted in exact quantitative determination of amino acids and in establishing the terminal bonds and the sequence of their positions in polypeptide rings. The interaction, still hardly known, between polypeptide rings is pointed out, which leads to the formation of disulfide bridges, sulfide links, diketopiperazine rings and others. A concept of the manner of

Card : 1/3

-1-

AUTHORS:

Kaverzneva, Ye. D.; Ivanov, V. I.; Krylova, G. A.

62-1-17/21

TITLE:

Chemical Conversions of Cellulose during Activated Oxidation with Hypochlorite (Khimicheskiye prevrashcheniya tsallyulozy pri aktivirovannom okislenii gipokloritom)

PERIODICAL:

Izvestiya Akademii Nauk SSSR, Otdeleniya Khimicheskikh Nauk, 1957,  
No. 1, pp. 121-122 (U.S.S.R.)

ABSTRACT:

Investigation was conducted to determine the effect of an activated oxidation process on the chemical conversions of cellulose in the presence of hypochlorite. Using urea in the role of activator, it was found that the chemical changes in the cellulose macromolecule during activated oxidation with hypochlorite have exactly the same character as during oxidation without activator. Activated oxidation is accompanied by a smaller drop in the degree of polymerization than non-activated oxidation. It was established that activators only

Card 1/2

KAVERZNEVA, Ye. D.

KUZNETSOVA, Z.I.; KAVERZNEVA, Ye.D.; IVANOV, V.I.

Influence of the ketone group on the stability of glucosidic  
linkage. Izv. AN SSSR. Otd. khim. nauk no. 5:655-656 My '57.  
(MIRA 10:8)

1. Institut organicheskoy khimii im. N.D. Zelinskogo Akademii  
nauk SSSR.

(Ketones) (Chemical structure)

KAVERZNEVA, Ye. D.

with F. V. Shmakova "Extraction of carbohydrate bearing peptide from egg albumin  
and the determination of its amino-acid content"

report presented at the 10th All-Union Conf. on Highly Molecular Compounds,  
Biologically Active Polymer Compounds, Moscow, 11-13 June 1958. (Vest. Ak.  
Nauk SSSR, 1958, No. 9, pp. 111-113)

KAVERZNEVA, K. and SHMAKOVA, F., (Moscow)

(Katerine)

"Glycopeptide in Tryptischen Hydrolysaten von Ovalbumin,"

Inst. of Organic Chem, Acad. Sci. USSR Moscow (im N. D. Zelinsky)

paper presented at the 4th Intl. Congress of Biochemistry, Vienna, 1-6 Sep 58.

AUTHORS: Kaverzneva, Ye.D., Shmakova, F. V. 30V,62-50-6-27/37

TITLE: The Separation of Glycopeptides From Enzymatic Hydrolysates of Egg-Albumin (Vydeleniye uglevodsoderzhashchikh peptidov iz fermentativnykh gidrolizatov yaichnogo al'bumina)

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye khimicheskikh nauk, 1958, Nr 6, pp. 785 - 786 (USSR)

ABSTRACT: The authors undertook to carry out a partial hydrolysis of egg-albumin (without splitting the carbohydrate complex) and to separate and investigate the carbohydrate-containing fragments of the molecule (in this case the peptides). Result: Among the products of the fermentative splitting of egg-albumin carbohydrate-containing peptides were found. These peptides permanent contained the following 5 amino acids (in basic peptides there were 6): arginine, glutamic acid, alanine, proline, and valine; basic peptides, in addition, contained lysine. There are 1 table and 1 reference.

Card 1/2

KAVERZNEVA, Ye.D.; KALIS, V.E.

Studying the stability of some N-glycosides, of amino acids and peptides in aqueous solutions [with summary in English]. Biokhimia 23 no.1:92-100 Ja-F '58. (MIRA 11:3)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR, Moskva.  
(GLYCOSIDES,  
N-glycosides, stability in aqueous solutions (Rus)  
(AMINO ACIDS,  
stability in aqueous solutions (Rus)  
(PEPTIDES,  
same)

KAVERZNEVA, Ye.D., SHMAKOVA, F.V.

Glycopeptides in pepsin hydrolysates of egg albumin [with summary  
in English]. Biokhimiia 23 no.5:793-799 S-0 '58 (MIRA 11:11)

1. Institut organicheskoy khimii imeni N.D. Zelinskogo AN SSSR,  
Moskva.

(EGG WHITE,  
ovalbumin, glycopeptides in pepsin hydrolysates (Rus))

(PEPTIDES,  
glycopeptides in pepsin hydrolysates of ovalbumin  
(Rus))

AUTHORS: Kaverzneva, Ye. L., Doctor of Chemical Sciences, Khurgin, Yu. I. SOV/30-58-9-4 2/51

TITLE: Biologically Active Polymer Compounds (Biologicheski aktivnyye polimery) All-Union Conference on Highly Molecular Compounds (Vsesoyuznaya konferentsiya po vysokomolekuljarnym soyediniyam).

PERIODICAL: Vestnik Akademii nauk SSSR, 1958, № 9. pp. 111 - 113 (USSR) <sup>24</sup>

ABSTRACT: The X All Union Conference took place in Moscow from June 11th to 13th. About 400 representatives of scientific institutions and colleges took part. In his opening-speech V.A.Kargin stressed the fact that, as there are structural analogies between natural and synthetic polymer compounds the task is set to bring about a controlled synthesis of models of biological objects. Further reports were delivered by B.N.Tarusov, A.G.Pasynskiy on some peculiarities of biological textures. G.M.Frank on the submicroscopic structure of some cell textures and muscle fibrils.

Card 1/4 K.G.Ioffe gave particulars on the location of 18 amino-acids

Biologically Active Polymer Compounds. All Union Conference on Highly Molecular Compounds.

SOV/30-58-9-42/51

in the tyrosine bearing peptide.

M.I.Plekhan on some peculiarities concerning peptides.

Ye.D.Kaverzneva, F.V.Shmakova on the extraction of carbohydrate bearing peptide from egg albumin and the determination of its amino-acid content.

S.Ye.Bresler, S.Ya.Frenkel' consider the configuration of the individual globular protein to be metastable.

V.A.Belitser recommends to distinguish denaturation from some other slight modifications of structure.

V.I.Kasatochkin, R.A.Dulitskaya examined kinetics and thermodynamics of renaturation under pressure.

M.B.Kalmakarova on the modification of structure of complex proteins.

D.N.Shigorin, N.V.Mikhaylov examined the typical bands in infrared adsorption spectra.

N.S.Andreyeva recommended a new classification of the kinds of polypeptide chains according to structure.

M.I.Millionova, N.S.Andreyeva constructed a model of polymer glycyl-L-proline.

Card 2/4

Biologically Active Polymer Compounds. All Union Conference on Highly Molecular Compounds.

SOV/30-58-9-42/51

A.L.Zaydes on characteristics of various collagens.  
Yu.A.Vladimirov, S.V.Konev on the mechanism of energy migration of light quanta in protein.  
M.S.Volkova, A.G.Pasynskiy made use of the radiation method for molecular weight determination of protein.  
G.V.Samsonov, R.B.Ponomareva, L.V.Dmitrenko gave particulars on the chromatographic purity determination of protein.  
A.N.Belozerskiy spoke about the composition of nucleinic acids secreted by micro-organisms and plants.  
V.S.Diskina, V.S.Tongur, D.M.Spitkovskiy spoke about the production of desoxy nucleoproteids by means of serum albumin and  $\alpha$ -Chymotrypsin.  
S.Ye.Bresler, Kh.M.Rubina on the part played by ribonucleic acid in the fermentative biosynthesis of protein.  
M.A. Prokof'yev and Z.A. Shabarova mention experimentally obtained data on the synthesis of derivatives of amino acids with nucleotides and nucleosides.

Card 3/4

Biologically Active Polymer Compounds. All Union Conference on Highly Molecular Compounds.

SOV/30-58-9-42/51

A.S. Spirin and L.P. Gavrilova reported on the results of investigations of ribonucleic acid of the tobacco mosaic virus. P.S. Vasil'yev spoke about the protein structures which are necessary for blood-transfusion. M.F. Shostakovskiy about how polyvinylpyrrolidone is obtained and how it is used as blood substitute. M.G. Brazhnikova dealt with the investigation of a large group of antibiotics of polypeptide type. The members of the conference stressed the necessity of the establishment of a special institute for protein research. It was recommended to promote the training of teams in the corresponding fields of science.

Card 4/4

Introduction of small oxygen quantities was investigated in the present paper. The oxygen should be gradually introduced to maintain a low level of the nitrogen content in the oxycellulose. Even a temporary oxygen excess should also be avoided (Table 1). The oxidation rate depends on temperature, the oxygen concentration in the gases, and the nature of the cellulose. The principal factor, however, is the ratio of NO/NO + NO<sub>2</sub> in the oxidizing gases. It was found that under given conditions this ratio should be 8-10% NO/NO + NO<sub>2</sub> (Table 2). As the NO-content in the gases was fluctuating during the experiment,

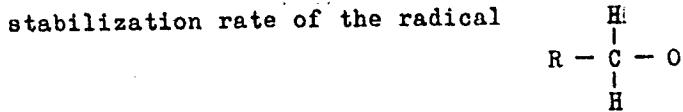
APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721210018-9

Card 1/3

SOV/62-59-2-26/40

## On the Mechanism of Cellulose Oxidation by Means of Nitrogen Oxides

the mean values of NO presented in table 2 do not exactly reflect the experimental conditions. For this reason, the time of the presence of cellulose under optimum conditions was calculated according to the duration of the individual experiments (Fig 1). A certain dependence of the oxidation intensity on the time of presence in the gas mixture was found. For the explanation of the transformations of cellulose observed during the oxidation the scheme recently suggested (Ref 5) is suited. The participation of  $N_2O_3$  in the reaction must there be expressed by establishing a theoretically well confirmed hypothesis that the stabilization of the  $R-CH_2O$  radicals takes place under the influence of both  $N_2O_4$  and  $N_2O_3$ (NO). If the stabilization rate of the radical



is higher under the effect of  $N_2O_3$  than under the effect of  $N_2O_4$ ,  $N_2O_3$  accelerates the oxidation. Such an acceleration was

Card 2/3

SOV/62-59-2-26/40

On the Mechanism of Cellulose Oxidation by Means of Nitrogen Oxides

observed at an NO-content of 7-10% of the total amount of the oxides. According to reference 5 only the  $N_2O_4$  adsorbed on the surface of the cellulose reacts with the latter. By gradual formation of  $N_2O_3$ , the initial concentration of  $N_2O_4$  is reduced and it is thus less adsorbed on the fiber. This leads in a certain stage to a retardation of the primary reaction of nitrite formation and to an inhibition of the oxidation process. It could be seen in the experiments performed under given conditions that on an  $N_2O_4$  concentration below 1.5 g/l the oxidation proceeded evidently slower. There are 2 figures, 2 tables, and 9 references, 5 of which are Soviet.

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR (Institute of Organic Chemistry imeni N. D. Zelinskogo of the Academy of Sciences, USSR)

SUBMITTED: May 23, 1957

Card 3/3

KALIS, V.M.; KAVERZHINA, Ye.D.

Stability of some peptide N-glucosides and proline N-glucoside  
in aqueous solutions. Biokhimiia 24 no.6:1026-1032 N-D '59.  
(MIRA 13:5)

1. Institute of Organic Chemistry, Academy of Sciences of the  
U.S.S.R., Moscow.  
(PEPTIDES chem.)  
(PROLINE chem.)

ZELINSKIY, Nikolay Dmitriyevich, akademik [1861-1953]; KAVERZNEVA,  
Ye.D., doktor khim.nauk, otv.red.; PLATE, A.F., doktor khim.nauk,  
red.; RUBINSTEIN, A.M., doktor khim.nauk, red.; EYDUS, Ya.T.,  
doktor khim.nauk, red.; BRUSOV, I.I., red.izd-va; TIKHOHOMIROVA,  
S.G., tekhn.red.

[Collected works] Sobranie trudov. Moskva, Izd-vo Akad.nauk  
SSSR. Vol.4. 1960. 598 p. [Author and subject index]  
— Imennoi i predmetnyi ukazateli. 26 p. (MIRA 14:2)  
(Zelinskii, Nikolai Dmitrievich, 1861-1953)  
(Chemistry, Organic)

KALIS,V. (Riga); KAVERZNEVA, Ye. (Riga)

Constants of equilibrium of reversible reaction of hydrolysis of  
N-glucosides of amino acids and peptides. Vestis Latv ak no.1:107-110  
'60. (EEAI 9:11)

1. Akademiya nauk Latviyskoy SSR, Institut organicheskogo sinteza.  
(Hydrolysis) (Glycosides) (Amino acids) (Peptides)

KAVERZNEVA, Yekaterina Dmitriyevna; FAYNBOYM, I.B., red.; RAKITIN,  
I.G., tekhn. red.

[Mystery of protein structure] Taina stroeniiia belkov. Moskva,  
Izd-vo "Znanie," 1962. 31 p. (Novoe v zhizni, nauke, tekhnike.  
IX Seriia: Fizika i khimiia, no.9) (MIRA 15:6)  
(Proteins)

KIVERZNEVA, YE. D., TSEE DE-FAN, and BOGDANOV, V. P. (USSR)

"A Study on the Carbohydrate-Peptide Fragment from Ovalbumin."

Report presented at the 5th International Biochemistry Congress,  
Moscow, 10-16 Aug 1961

KAVERZNEVA, Ye.D.; KRAVCHENKO, N.A.; KLEOPINA, G.V.

Nature of the enzymatic activity of lysozyme. Izv.AN SSSR Otd.  
khim.nauk no.4:729 Ap '61. (MIRA 14:4)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.  
(Lysozyme)

KAVERZNEVA, Ye.D.; BOGDANOV, V.P.

Isolating from egg albumin a fragment consisting of a polysaccharide  
and aspartic acid. Biokhimiia 26 no. 1:105-109 Ja-F '61.  
(MIRA 14:2)

1. Institute of Organic Chemistry, Academy of Sciences of the  
U.S.S.R. Moscow.  
(ALBUMIN) (POLYSACCHARIDES) (ASPARTIC ACID)

KAVERZNEVA, Ye.D.; TSI DE-FAN [Ch'i Tieh-fang]

Glucopeptides liberated by proteases from egg albumin. Biokhimia  
26 no.3:420-425 My-Je '61. (MIRA 14:6)

1. Institut organicheskoy khimii imeni N.D.Zelinskogo Akademii  
nauk SSSR, Moskva.  
(PROTEASE) (ALBUMIN) (PEPTIDES)

KAVERZNEVA, Ye.D.; TSI DE-FAN [Ch'i Tieh-fang]

Isolation and characteristics of a polysaccharide complex from  
egg albumin. Biokhimiia 26 no.5:782-786 S-0 '61. (MIRA 14:12)

1. Institut organicheskoy khimii imeni N.D.Zelinskogo AN SSSR, Moskva.  
(POLYSACCHARIDES) (ALBUMIN)

KAVERZNEVA, Ye.D.

Protein synthesis. Priroda 50 no.9:41-47 S '61.  
(MIRA 14:8)

1. Institut organicheskoy khimii AN SSSR (Moskva).  
(Proteins)  
(Chemistry, Organic--Synthesis)

KRAVCHENKO, N.A.; KLEOPINA, G.V.; KAVERZNEVA, Ye.D.

Study of the catalytically active centers of lysozyme. Dokl.  
AN SSSR 144 no.1:118-121 My '62. (MIRA 15:5)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.  
Predstavлено академиком B.A.Kazanskim.  
(Lysozyme) (Catalysis)

KAVERZNEVA, Ye.D.; BOGDANOV, V.P.

Improved method for separating the aspartic-polysaccharide fragment  
from ovalbumin and some of its characteristics. Biokhimia 27  
no.2:273-278 Mr-Ap '62. (MIRA 15:8)

1. Institut organicheskoy khimii AN SSSR, Moskva.  
(ALBUMIN) (POLYSACCHARIDES) (ASPARTIC ACID)

"APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000721210018-9

KAVERZNEVA, Ye. D., doktor khim. nauk

European Symposium on Peptides. Vest. AN SSSR 59 no.1:82-83  
Ja '63. (MIRA 16:1)

(Peptides)

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000721210018-9"

KAVERZNEVA, Ye. D.; KONOVALOVA, M. I.

Synthesis of N- $\beta$ -asparagine)-D-glucosamine, O- $\beta$ -methyl-N-( $\alpha$ -methyl- $\beta$ -L-asparagine)-D-glucosaminide and their derivatives. Izv. AN SSSR, Otd. khim. nauk no.1:124-128 '63.  
(MIRA 16:1)

1. Institut organicheskoy khimii im. N. D. Zelinskogo AN SSSR.

(Glucosamine)

KAVERZNEVA, Ye. D.; BOGDANOV, V. P.; ANDREYEVA, A. F.; SHMAKOVA, F. V.

"The chemical bond of the polysaccharide-prosthetic group in ovalbumin, and the situation of this group in the protein molecule."

report submitted for Natl Mtg, American Chemical Society, Philadelphia, 5-10 Apr 64.

Inst of Organic Chemistry, Moscow.

KAVERZNEVA, Yekaterina Dmitriyevna; ANDREYEVA, A. P.; BOGDANOV, V. P.

"Some properties and the structure of a glucosamine-aspartic fragment from ovalbumin."

Report to be submitted for the 3rd Intl. Symposium on the Chemistry of Natural Products (IUPAC), Kyoto, Japan, 12-18 April 1964.

KAVERZNEVA, Yekaterina Dmitriyevna,

"Concerning the bond between carbohydrate and albumen in ovalbumin and ovomucoid".

report submitted for the International Symposium on the Chemistry of Carbohydrates,  
Muenster, West Germany, 13-17 Jul 64

KRAVCHENKO, Nikoley Alekseyevich; KLEOPINA, Galina Vladimirovna;  
KAVERZNEVA, Ye.D., doktor khim. nauk, otv. red.;  
SEMENENKO, E.I., red.

[Manual for the chromatographic analysis of amino acids  
on columns] Rukovodstvo po khromatograficheskому analizu  
aminokislot na kolonkakh. Moskva, Nauka, 1964. 69 p.  
(MIRA 18:1)

KAVERZNEVA, Ye.D., doktor khim. nauk

International symposium on the chemistry of carbohydrates.  
Vest. AN SSSR 34 no.10:93-95 O '64.

(MIRA 17:11)

KAVERZNEVA, Ye.D.; GASHKO, G.P. [Hashko, H.P.]

Study of the carbohydrate composition of a fraction of ceruloplasmin.  
Ukr. biokhim. zhur. 35 no.4:507-513 '63. (MIRA 17:11)

1. Institute of Organic Chemistry of the Academy of Sciences of  
the U.S.S.R., Moscow.

DANILOV, S.N., glav. red.; ARBUZOV, A.Ye., red.; VVEDENSKIY, A.A.,  
red.; VENUS-DANILOVA, E.D., red.; ZAKHAROVA, A.I., red.;  
IOFFE, I.S., red.; KAVERZNEVA, Ye.D., red.; LUTSENKO, I.F.,  
red.; MISHCHENKO, K.P., red.; NEMTSOV, M.S., red.; PETROV,  
A.A., red.; FREYDLINA, R.Kh., red.; SHENYAKIN, M.M., red.;  
SHUKAREV, S.A., red.; YUR'YEV, Yu.K., red.

[Biologically active compounds] Biologicheski aktivnye  
soedineniya. Moskva, Nauka, 1965. 305 p.

(MIRA 18:7)

"APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000721210018-9

KAVERZNEVA, Ye.D., MAKSIMOVA, G.N.

Fractionation of tuberculoprotein on diethylaminocethyl-cellulose.  
Biokhimiia 29 no.3:445-451 My-Je '64. (MIRA 18:4)

1. Institut organicheskoy khimii imeni Zelinskogo AN SSSR, Moskva.

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000721210018-9"

KLEOPINA, G.V.; KRAVCHENKO, N.A.; KAVERZNEVA, Ye.D.

Role of  $\epsilon$ -amino groups of lysine in lysozyme. Izv. AN SSSR. Ser.  
khim. no.5:830-838 '65. (MIRA 18:5)

1. Institut organicheskoy khimi im. N.D.Zelinskogo AN SSSR.

DANILOV, S.N., glav. red.; ZAKHAROVA, A.I., red.; ARBUZOV, A.Ye.,  
red.; VVEDENSKIY, A.A., red.; VENUS-DANILOVA, E.D., red.;  
IOFFE, I.S., red.; KAVIRZNEVA, Ye.D., red.; LUTSENKO,  
I.F., red.; MISHCHENKO, K.P., red.; NEMTSEV, M.S., red.;  
PETROV, A.A., red.; FREYDLINA, R.Kh., red.; SHEMYAKIN,  
M.M., red.; SHCHUKAREV, S.A., red.; YUR'YEV, Yu.K., red.

[Problems of organic synthesis] Problemy organicheskogo  
sinteza. Moskva, Nauka, 1965. 323 p. (MIRA 18:8)

KRIVCHENKO, N.A.; KLEOPINA, G.V.; KAVERZNEVA, Ye.D.

Study of the reaction of carboxymethylation of lysozyme with  
iodoacetic acid. Riekhimija 30 no.1:195-202 Ja.-F '65.

(MIF 18:6)

I. Institut organicheskoy khimii imeni Zelinskogo AN SSSR,  
Moskva.

KRAVCHENKO, N.A.; KLEOPINA, G.V.; KAVERZNEVA, Ye.D.

Study of an active center of lysozyme by the carboxymethylation method. Biokhimiia 30 no.4:713-720 Jl-Ag '65. (MIRA 18;8)

1. Institut organicheskoy khimii imeni N.D. Zelinskogo AN SSSR,  
Moskva.

MAKSIMOV, V.I.; KAVERZNEVA, Ye.D.; KRAVCHENKO, N.A.

Nature of lysozyme action on oligosaccharides, fragments of chitin.  
Biokhimia 30 no.5:1007-1014 S-0 '65. (MIRA 18:10)

1. Institut organicheskoy khimii imeni N.D.Zelinskogo AN SSSR,  
Moskva.

RAVERZNEVA, Ye.S.; RASHEV IN, Yu.A.

Isolation and purification of *Streptomyces gri* vis protease  
on carboxymethyl cellulose. Biokhimiia 29 no.6:1042-1047  
1964.  
(MIRA 18:12)

1. Institut organicheskoy khimii imeni N.D.Zelinskogo AN SSSR,  
Moskva. Submitted February 24, 1964.

UNANYAN, M.P.; KONDRAT'YEVA, G.V.; LOCHMELIS, A.Ya.; ZAV'Y'LOV, S.I.;  
ZEYFMAN, Yu.V.; GAMBARYAN, N.P.; MINASYAN, R.B.; KNUNYANTS, K.L.;  
KOCHARYAN, S.T.; ROKHLIN, Ye.M.; KAVERZNEVA, Ye.D.; KORSHAK, V.V.;  
ROGOZHIN, S.V.; DAVANKOV, V.A.; TSEYTLIN, G.M.; PAVLOV, A.I.;  
ZAKHARKIN, L.I.; OKHLOBYSTIN, O.Yu.; SEMIN, G.K.; BABUSHKINA, T.A.;  
BLIEVICH, K.A.

Letters to the editor. Izv. AN SSSR. Ser. khim. no.1:1909-1914  
'65. (MERA 18:1)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR  
(for Unanyan, Kondrat'yeva, Lochmelis, Zav'yalov, Kaverzneva).
2. Institut elementoorganicheskikh soyedineniy AN SSSR (for  
Zeyfman, Gambaryan, Minasyan, Knunyants, Kocharyan, Rokhlin,  
Korshak, Rogozhin, Davankov, Zakharkin, Okhlobystin, Semin,  
Babushkina, Bilevich).

KAVERZNEVA, Ye.D.; LAPUK, V.Kh.

Reaction of ovomucoid with hydroxylamine. Biokhimiia 29 no. 1:  
138-141 Ja-F '64. (MIRA 18:12)

1. Institut organicheskoy khimii imeni Zelinskogo AN SSSR,  
Moskva. Submitted June 8, 1963.

KRAVCHENKO, N.A.; KLEOPINA, G.V.; KAVERZNEVA, Ye.D.

Isolation and desalting of the products of lysozyme modified  
by iodoacetic acid. Biokhimiia 30 no. 3:534-542 My-Je '65  
(MIRA 19:1)

1. Institut organicheskoy khimii imeni Zelinskogo AN SSSR,  
Moskva.

KAVERSNEVA, Yu. G.

KAVERSNEVA, Yu. G.

"Adaptation Characteristics of Heather Plants of the Pine Forests of Moscow Oblast." Cand Biol Sci, Moscow Oblast Pedagogical Inst, Min Education RSFSR, Moscow, 1955. (KL, No 11, Mar 55)

SO: Sum No. 670, 29 Sep 55- Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (15)

SOV/81-59-10-35287

Translation from: Referativnyy zhurnal. Khimiya, 1959, Nr 10, p 274 (USSR)

AUTHORS: Balezin, S.A., Bogatyrev, Ye.V., Kaverziyeva, V.P.

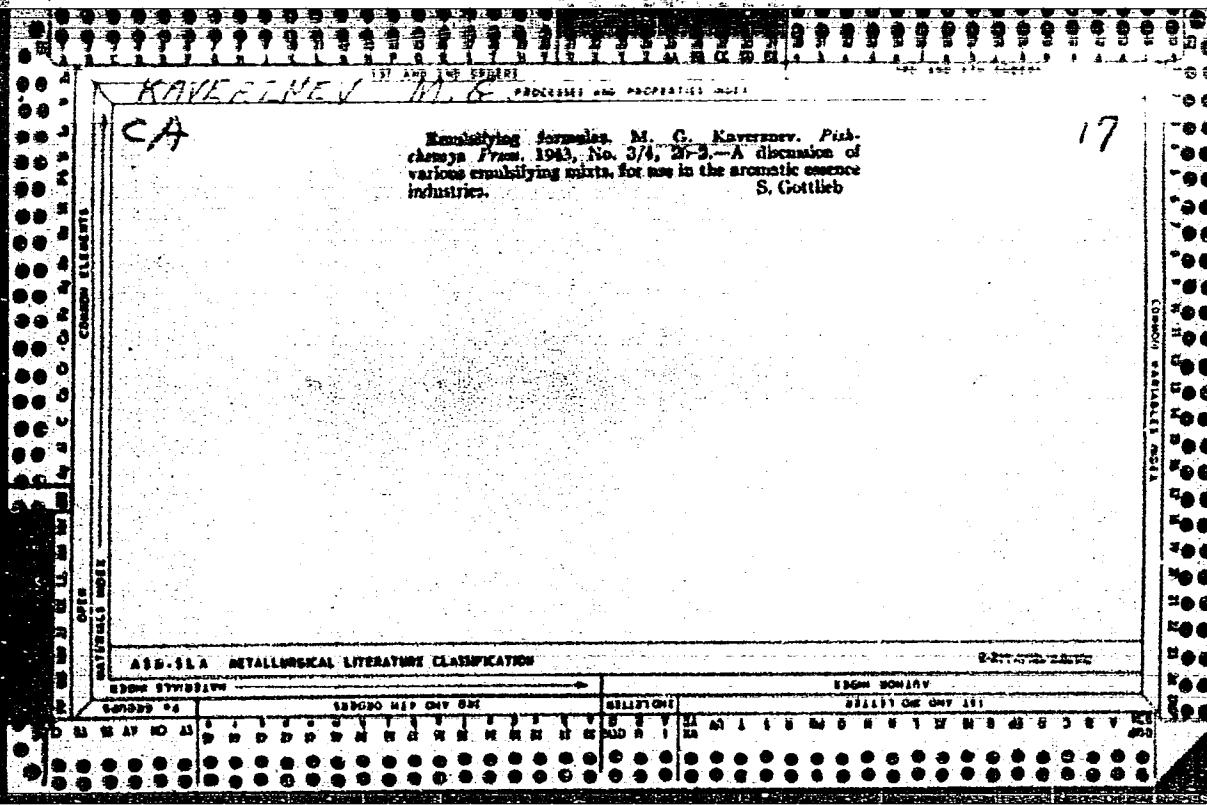
TITLE: Protection of Metal Items Against Atmospheric Corrosion 18

PERIODICAL: V sb.: Metody issled. inhibitorov korrozii metallov (Vses. sov. nauchno-tekhn. o-v, Nr 7). Moscow, 1958, pp 93-103

ABSTRACT: For protecting metal items (steel, <sup>1</sup>nickel-, <sup>1</sup>tin- and <sup>1</sup>chrome-plated) against corrosion it is proposed to use paper impregnated with a 30% aqueous solution of sodium benzoate (12 g/m<sup>2</sup> of paper). The technology of preparing such a paper is described. The results of the tests of the protective properties of this paper are cited. (V)

M.M.

Card 1/1



KAVERZNEVA, Yu. G.

Aerenchyma in Zizania aquatica L. Bot. zhur. 45 no.4:572-577 Ap '60.  
(MIRA 14:5)

1. Kostromskoy sel'skokhozyaystvennyy institut.  
(Wild rice) (Plant cells and tissues)

KAVERZNEVA, Yu. G.

Morphogenesis of *Ramischia secunda* Garcke. Bot. zhur. 44 no. 7:1014-1017  
Jl '59. (MIRA 12:12)  
(Wintergreen) (Plants--Evolution)

L 29381-66 EWT(m)/EWP(t)/ETI IJP(c) JD  
ACC NR: AP6019796

SOURCE CODE: UR/0286/65/000/004/0113/0113

INVENTOR: Prokhorov, A. V.; Shalayev, I. I.; Fetisov, S. G.; Prokhorov, P. A.;  
Tutov, I. Ye.; Parshin, A. A.; Kavesh, L. D.; Slutskaya, T. N.; Yungar, S. V.

ORG: none

TITLE: Low-alloy steel / Class 18, No 148088

SOURCE: Byulleten' izobreteniij i tovarnykh znakov, no. 4, 1965, 113

TOPIC TAGS: low alloy steel, vanadium, boron, tensile strength, heat resistance

ABSTRACT: A low-alloy steel is proposed which has vanadium and boron added to it to increase strength and heat resistance. Its chemical composition is: 0.13-0.18% C, 1.2-1.6% Mn, 0.5-0.8% Si, 0.3-0.6% Cr, 0.15-0.25% Mo, 0.08-0.12% V and 0.003% (max) B.  
[JPRS]

SUB CODE: 11, 20 / SUBM DATE: none

cont 1/1 CC

AGRANENKO, V.A., kand.med.nauk; LEVITSKAYA, L.A., kand.med.nauk;  
KAVESHNIKOVA, B.F.

Heparinization method and blood coagulation control during hemo-  
dialysis using the artificial kidney" apparatus. Khirurgiia 38  
no.10:51-58 O '62. (MIRA 15:12)

1. Iz pchetchmogo tsentra (zav. V.A. Agranenko) TSentral'nogo  
instituta gematologii i perelivaniya krovi (dir. - dotsent A.Ye.  
Kiselev) i Nauchno-issledovatel'skogo instituta eksperimental'noy  
khirurgicheskoy apparatury i instrumentov (dir. - dotsent M.G.  
Anan'yev).

(ARTIFICIAL KIDNEY) (BLOOD—COAGULATION)  
(HEPARIN)

UMNOVA, M.A.; AGRANENKO, V.A.; ICHALOVSKAYA, T.A.; PISKUNOVA, T.M.;  
KAVESHNIKOVA, B.F.

Sensitization to Duffy factor ( $F_y^d$ ) as a cause of blood transfusion  
complication with the development of acute renal failure. Probl.  
gemat. i perel. krovi 9 no.5:52-55 My '64. (MIRA 18:3)

1. TSentral'nyy ordena Lenina institut gematologii i perelivaniya  
krovi (dir.- dotsent A.Ye. Kiselev), Moskva.

KAVESHENIKOVA, K.I.  
USSR/Human and Animal Physiology - Excretion.

V-6

Abs Jour : Ref Zhur - Biol., No 4, 1958, 18288

Author : K.I. Kaveshnikova.

Inst : The Leningrad Veterinary Institute.

Title : The Reflex Effects of Milking Stimuli on Renal Function.

Orig Pub : Sb. rabot. Leningr. ve. in-t, 1956, No 18, 121-128

Abstract : No abstract.

Card 1/1

KAVESHENIKOVA, K.I.  
APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721210018-9"  
Letting down of milk in cows using milking machines with various  
parameters. Zhivotnovodstvo 22 no.7:83-87 '60. (MIRA 16:5)

1. Institut fisiologii imeni I.P.Pavlova AN SSSR.  
(Milking machines)

KAVESHNIKOVA, K.I.

Lactation reflex in cows during suckling, and manual and  
machine milking. Fiziol. zhur. 49 no.1:103-110 Ja '63.  
(MIRA 17:2)

1. From the Laboratory for Physiology of Farm Animals and  
Research Experimental Station, I.P. Pavlov Institute of  
Physiology, Leningrad.

KAVESHNIKOVA, K. I.

"The Reflex Effect of the Udder on the Function of the Kidneys."  
dissertation defended for the degree of Candidate of Biological Sciences at the  
Inst. for Physiology im I. P. Pavlov.

Defense of Dissertation (Jan-Jul 1957)  
Sect. of Biological Sciences  
Vest. AN SSSR, 1957, v. 27, No. 12, pp. 118-120

KAVESHNIKOVA, L.V.

Acute alcoholic paranoids. Prak.sudebnopsikh.ekspert. no.6:  
46-51 '62. (MIRA 16:2)  
(PARANOIA) (ALCOHOLICS)

ALIYEV, B.M.; MISYUNAS, I.I.; KAVESHNIKOVA, S.V.; SIZOV, P.P.

Work of a group in charge of the dosage control in large focus  
gamma therapy. Med. rad. 10 no. 12:13-21 D '65 (MIRA 19:1)

1. Rentgeno-radiologicheskiy otdel ( zav. - prof. I.I. Tager)  
Instituta eksperimental'noy i klinicheskoy onkologii AMN SSSR  
i 62-ya Gorodskaya klinicheskaya onkologicheskaya bol'nitsa,  
Moskva.

KAVETSKAYA, A.A.; TOKAR', L.O.

Unfavorable effect of a large quantity of pollen on the pollination  
of walnut. Bot. zhur. 48 no.4:580-585 Ap '63. (MIRA 16:5)

1. Ukrainskaya sel'skokhozyaystvernnaya akademiya.  
(Walnut) i(Fertilization of plants)

KAVETSKAYA, A.A. [Kavets'ka, H.O.]

Cytological observations on the accumulation of nutritive substances in rape seeds. Ukr.bot.zhur. 15 no.4:24-31 '58.  
(MIRA 12:5)

1. Ukrainskaya akademiya sel'skokhozyaystvennykh nauk, kafedra  
botaniki.  
(Rape (Plant)) (Seeds)

KAVETSKAYA, A.A. [Kavets'ka, H.O.]

Development of the male gametophyte in the English walnut  
(*Juglans regia L.*). Ukr. bot. zhur. 21 no.1:52-57 '64.  
(MIRA 17:3)

1. Ukrainskaya sel'skokhozyaystvennaya akademiya, Kiyev.

KAVETSKAYA, A. A., Cand Biol Sci -- (diss) "A Cytoembryological Study of Rape." Kiev, 1960, 16 pp, Ministry of Agriculture UkrSSR; Ukrainian Academy of Agricultural Sciences) 200 copies, no price given (KL, 21-60, 121)

KAVETSKAYA, A.A., assistant

Embryology of rape and the accumulation of nutrients in seeds.  
Nauch. trudy VASHN 10:111-119 '60. (MIRA 14:3)  
(Rape(Plant))  
(Botany—Embryology)

KAYETSKAYA, A.G.; LAPOVA, A.I., starshiy inzhener-agrometeorolog;  
SUKNEVA, Ye.V., starshiy inzhener-klimatolog; VLADIMIROVA,  
N.V., inzh.-agrometeorolog; KURIYEV, M.I., inzh.-agrometeorolog;  
TSERTSVADZE, Sh.I.; CHIRAKADZE, G.I., dotsent, starshiy nauchnyy  
sotrudnik; BABAYEV, A.D., otv.red.; USHAKOVA, T.V., red.; VOLKOV,  
N.V., tekhn.red.

[Concise agroclimatic reference book on the Azerbaijan S.S.R.]  
Kratkii agroklimaticheskii spravochnik po Azerbaidzhanskoi SSR.  
Leningrad, Gidrometeor.izd-vo, 1959. 67 p. (MIRA 13:2)

1. Azerbaydzhanskaya S.S.R. Upravleniya gidrometeorologicheskoy  
sluzhby. 2. Zaveduyushchiy otdelom agrometeorologii Tbilisskogo  
Nauchno-issledovatel'skogo gidrometeorologicheskogo instituta  
(for TSertsavadze). 3. Nachal'nik Upravleniya gidrometeorologicheskoy  
sluzhby Azerbaydzhanskoy SSR (for Babayev).  
(Azerbaijan--Crops and climate)

KAVETSKIS, M.A. [Kaveckis, M.], prof. (Kaunas)

Halite and gypsum in moraine deposits. Priroda 52 no.3:75-76  
'63. (MIRA 16:4)  
(Lithuania—Rock salt) (Lithuania—Gypsum)

KABETSKIS, V. I.

USSR/Nuclear Physics - Beryllium Atoms

Oct 51

"Interaction of Configurations in Peryllium-Type Atoms," A. P. Yutsis, V. I. Kabetskis, Leningrad Math Inst, Acad Sci USSR

"Zhur Eksper i Teoret Fiz" Vol XXI, No 10, pp 1139-1145

Computes effect of interaction of configurations on energy of basic configuration of iso-electron atoms  $\text{Li}^-$ ,  $\text{Be}^{+2}$ ,  $\text{N}^{+3}$  and  $\text{O}^{+4}$  and compares results with exptl data. Discusses stability of neg ions of alkali metals (cf. V. A. Fok and M.I. Petrashen, ibid. 6, 1, 1936; Morse, Young and Haurwitz, Phys Rev, 48, 948, 1935). Authors acknowledge advice of Acad V. A. Fok and M. G. Veselov, Submitted 27 Nov 50.

PA 197T97

KAVETSKIS, V. I.

Dissertation: "Some Results of Application of Incomplete Separation of Variables and Multiconfigurative Approximation." Cand Phys-Math Sci, Vil'nyus State U, Vil'nyus, 1953. (Referativnyy Zhurnal--Fizika, Moscow, Aug 54)

SO: SUM 393, 28 Feb 1955

KAVETKIS, V.

ANALYTICAL ONE-ELECTRON WAVE FUNCTIONS  
MULTI-CONFIGURATIONAL APPROXIMATIONS FOR  
ATOMS OF THE TYPE OF HELIUM AND BERYLLIUM  
V. I. Kavetskis and A. P. Yutis *Zhur. Eksp. i Teoret.*  
Fiz. 35 No. 3, 257-63 (1953) (In Russian)

Configurations are formed from products of one-electron functions, and the parameters are determined by a variational calculation. Results for energies are given for two- and three-configurational approximations. The two-configurational calculations in helium are  $1s^2 2p^1$ ,  $1s^2 2p^2$  and  $1s^2 1s^1 2s^1$ . In  $1s^2 2p^1$  and  $1s^2 2s^1 1s^1$  the same parameter is used in a given one-electron function in each configuration throughout a given approximate calculation. (Science Abstracts)

KAVETSKIS, V. I.

USSR/Physical Chemistry - Atom, B-3

Abst. Journal: Referat Zhur - Khimiya, No 19, 1956, 60695

Author: Batarunas, I. V., Kavetskis, V. I., Yutsis, A. P.

Institution: None

Title: Three-Configurational Approximation in the Case of Atoms of the Beryllium Type

Original

Periodical: Tr. AN LitSSR, 1955, B3, 9-16; Lithuanian résumé

Abstract: Three-configurational approximations  $1s^2 2s^2 - 1s^2 2p^2 - 2s^2 2p^2$  (abbreviated 1-2-3) is applied to primary state of atoms Be, B and C<sup>2</sup>. For configuration 1 are utilized self-coordinated wave functions (Referat Zhur - Khimiya, 1956, 9001). For configurations 2 and 3 included in wave function of primary state as small corrections are utilized analytical hydrogen-like wave functions:  
 $P(1s|r) = 2\alpha^{3/2} r \exp(-\alpha r)$ ;  $P(2s|r) = [12\beta^5/(\alpha^2 - \alpha\beta + \beta^2)]^{1/2} \times r \{1 - [(\alpha + \beta)/3]r\} \exp(-\beta r)$ ;  $P(2p|r) = (4/3\beta^5)^{1/2} r^2 \times \exp(-\gamma_1 r)$ . Utilized are  $\alpha$  and  $\beta$  determined at one-configurational approximation

Card 1/3

USSR/Physical Chemistry - Atom, B-3

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 60695

Abstract: for the primary state (Fok, V. A., Petrashen', M. I., Zh. eksperim. i teor. fiziki, 1936, 6, 1). For determination of parameters  $\gamma_2$  and  $\gamma_3$  the 3-configurational approximation is divided into 2 2-configurational approximations: 1-2 and 1-3. Values  $\gamma_2$  were in part determined before (Referat Zhur - Khimiya, 1955, 8971). In the paper are tabulated the values of parameters contained in the above-state one-electron functions and is also tabulated the function  $P(2p/r)$  for B. Taking into account the interaction of configurations 1-2-3 the complete 4-electron wave function is represented in the form  $\frac{(1 + a_{12})^2(1 + a_{13})^{27-1/2}}{(2p^2|x_1, x_2|)} \Psi(2s^2/x_1, x_2) + a_{12} \Psi(2p^2|x_1, x_2|) \Psi(1s^2|x_3, x_4) + a_{13} \Psi(2p^2|x_3, x_4|)$ . It shows that interaction of configuration reduces itself in this case to a utilization of 2-electron wave functions (to an incomplete separation of variables). Values of energy of primary state in the iso-electronic series Be,  $B^+$  and  $C^{2+}$  (in atomic units): calculated by the usual method of self-coordinated field of Fok, are -14.577; -24.238; -36.406; calculated at 3-configurational approximation utilizing for configurations 2 and 3 the analytical functions -14.638; -24.314; -36.496; calculated by solving simplified

Card 2/3

Card 3/3

KAVECKIS, V.

USSR/Atomic and Molecular Physics - Physics of the Atom, D-1

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 34260

Author: Batarunas, J., Kaveckis, V., Jucys, A.

Institution: None Acad Sci Lith SSR

Title: Application of the Method of the Incomplete Separation of Variables to the Helium-Type Atoms

Original Periodical: Darbai Fizikos-techn. inst. Lietuvos TSR Mokslu Akad., 1955, 1, 25-33; Lithuanian; Russian resumé

Abstract: The work is devoted to the application of the method of incomplete separation of variables, the theory of which was given by V. A. Fok, M. P. Veselov, and M. I. Petroshen' (Zhur. eksper. i teoret. fiziki, 1940, 10, 723) to the basic configuration of helium-type atoms with the aid of the numerical wave functions of the self-consistent field. The numerical calculations were carried out with the aid of solutions of the equations for the self-consistent field. The results for 6 atoms (ions) of the helium type, starting with H<sup>-</sup> and ending with C<sup>4+</sup>, are given in a table

1 OF 1

- 1 -

USSR/Nuclear Physics, Fok's Equation *KINETIKS, V. I.*

FD-3337

Card 1/1 Pub. 146 - 9/28

Author : Kibartas, V. V., Kavetskis, V. I., and Yutsis, A. P.

Title : Self-consistent Fok's field in three configurative approximation to the Beryllium atom

Periodical : Zhur. Eksp. i Teor. Fiz., 29, No 5, 623-628, 1955

Abstract : A practical method of self-consistent Fok's field application to multiconfigurative approximation is analyzed. A three configurative approximation  $1s^2 2s^2 - 1s^2 2p^2 - 2s^2 2p^2$  is applied to the basic configuration of the beryllium atom. The function of total potential and the radial possibility distribution are presented. Six references.

Institution : Vilno State University, Vilno State Pedagogical Institute

Submitted : July 12, 1954

*KAVETSKIS, V. I.*

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721210018-9"  
USSR/Atomic and Molecular Physics, Physics of the Atom

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 34264

Author: Jucys, A. P., Batarunas, J. V., Kaveckis, V. I.

Institution: None

Title: Many-Configuration Approximation in the Case of Atoms of the Lithium Type

Original Periodical: Lietuvos TSR mokslu akad. darbai, 1956, B2, 3-10; Lithuanian  
resume

Abstract: Starting with a model of 2-electron state, the authors suggest a method for constructing the wave functions of the entire atom in the many-configuration approximation, in which they dispense with the absolute equality of the radial single-electron wave functions with identical sets of values of the fundamental and orbital quantum numbers. In this method, the 3-configuration approximation with the aid of the analytic hydrogen-like single-electron wave functions is applicable to the 2 lower configurations of 4 atoms of the lithium-type. In the case of the lithium atom, one employs also the wave functions of the Fok self-consistent field.

KAVETSKIS, V.I.

Category : USSR/Atomic and Molecular Physics - Physics of the Atom

D-1

Abs Jour : Ref Zhur - Fizika, No 2, 1957 No 3360

Author : Vizbarayte, Ya, I., Shironas, V.I., Kavetskis, V.I., Yutsis, A.P.

Title : The Fok Self-Consistent Field in the Multi-Configuration Approximation  
for the Helium Atom

Orig Pub : Optika i spektroskopiya, 1956, 1, No 3, 277-281

Abstract : Solutions to the Fok equations are given in the two-configuration approximation for the configurations  $2p^2$ ,  $2s^2$ ,  $3d^2$ , and  $3p^2$ , considered as accountable configurations with respect to the ground configuration of the helium atom. With the aid of these solutions, the authors determined the values of the correction to the energy of the ground configuration at various multi-configuration approximations. Also given are the values of the correction to the energy, obtained with the aid of the self-consistent Fok field in the six-configuration approximation  $1s^2$  --  $2p^2$  --  $2s^2$  --  $3d^2$  --  $3p^2$  --  $2p3p$ , and were compared with the experimental values of the energy.

Card : 1/1

Card : 1/1

"APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000721210018-9

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000721210018-9"

Kavetskis, V.I.

USSR/Atomic and Molecular Physics - Physics of the Atom.

D-1

Abs Jour : Referat Zhur - Fizika, No 5, 1957, 11358

Author : Yubsis, A.P., Ushpalis, K.K., Kavetskis, V.I., Levinson, I.B.

Inst : Vilnius University, USSR

Title : Total Dipole Strength in the Approximation of Incomplete Separation of Variables for Two-Electron Atoms.

Orig Pub : Optika i spektroskopiya, 1956, No 5, 601-605

Abstract : The strength of the dipole transitions  $1s^2 \rightarrow 1s2p$ ,  $2s^2 \rightarrow 1s2p$ ,  $2p^2 \rightarrow 1s2p$  are calculated for He, Li<sup>+</sup> and Be<sup>2+</sup>. For the states  $n\ell^2$ , the authors employ wave functions with incomplete separation of variables, including the factor

$$\mu_1 + \mu_2 r_{12} + \mu_3 (r_1 + r_2). \text{ The } 1s2p \text{ state is described}$$

Card 1/2

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721210018-9"

USSR/Atomic and Molecular Physics - Physics of the Atom.

D-1

Abs Jour : Ref Zhur - Fizika, No 5, 1957, 11358

in the approximation of total separation of variables. The parameters of the analytic wave functions are taken from previous works. It is noted that two-electron transitions are possible when using incomplete separation of variables. For the transition  $2s^2 \rightarrow 1s2p$  the authors obtained dipole strengths of 0.4, 0.01 and 0.002 for He, Li<sup>+</sup>, and Be<sup>2+</sup> respectively. For the singlet transitions  $2p^2 \rightarrow 1s2p$ , the use of incomplete separation of variables leads to a very substantial reduction in the dipole strength. As the charge of the nucleus increases, the change becomes less.

Card 2/2

AUTHORS: Yutsis, A. P., Vizbarayte, Ya. I.,  
Kavetskis, V. I., Batarunas, I. V. SOV/48-22-6-6/28

TITLE: The Approximation of the Models of Two-Electron States and the  
So-Called Anomaly in the Spectra of Carbon, Nitrogen, and Oxygen  
(Priblizheniye modeli dvukhelektronnykh sostoyaniy i tak  
nazyvayemaya anomaliya v spektrakh ugleroda, azota i kisloroda)

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya fizicheskaya, 1958, Vol. 22,  
Nr 6, pp. 665-667 (USSR)

ABSTRACT: For quantum-technical calculations of the atom the method of the  
incomplete separation of variables (Ref 1) and that of multicon-  
figuration approximation (Ref 2) are employed, which are both  
difficult from a mathematical point of view. Simplification may  
be attained by using these methods for two-electron systems. It  
is therefore assumed in this paper that also other calculations  
can be carried out on the basis of the two-electron systems by  
means of approximation methods. The second and more simple method  
is here given preference.  
The chapter entitled: "The Case of Three-Electron Systems" deals  
with the ground state and the first excitation state for atoms

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of the lithium type. With respect to the two internal electrons a 5-configuration approximation:  $1s^2-2p^2-2s^2-3d^2-3p^2$  is used (Ref 4) and external electrons are dealt with by the approximation method for electron states. The chapter: "The Problem of Anomaly in the Spectra of Carbon, Nitrogen, and Oxygen" deals with the values of  $q = 2, 3, 4$ , where, in the intervals between the energies of individual terms, the anomaly occurs; for carbon or oxygen the experimental value of

$\frac{1S - 1D}{1D - 3P} = 1,13$  and the theoretical value is 1,5. In the case of nitrogen the experimental value obtained is 0,5, the theoretical value is 0,67. If the problem is solved according to the two-electron state, the values 1,1 and 0,5 respectively are obtained, which are near the experimental values. In the chapter: "Evaluation of Results" the conclusion is arrived at that in multi-configuration approximations carried out on the basis of two-electron states the conception of the shell structure of

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electrons in atoms is maintained. There are 12 references, 7 of  
which are Soviet.

ASSOCIATION: Institut fiziki i matematiki Akademii nauk Litovskoy SSR,  
Vil'nyusskiy gos. pedagogicheskiy institut i Vil'nyusskiy gos.  
universitet im. V. Kapsukas (Institute of Physics and  
Mathematics, AS Lithuanian SSR, Institute of Pedagogics and State  
University imeni V. Kapsukas in Vil'nyus)

1. Atoms--Mathematical analysis    2. Carbon--Spectra    3. Nitroge  
--Spectra    4. Oxygen--Spectra

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SHIRVATIS, A.I. [Sirvatis, A.]; DENIS, V.I. [Dienys, V.]; KAVETSKITE, M.V.  
[Kaveckyte, M.]

Photoconductivity of polycrystalline cadmium sulfide and cadmium  
selenide with the exposure to -rays. Liet ak darbai B no.2:47-59  
'60. (EEAI 10:1)

1. Institut fiziki i matematiki Akademii nauk Litovskoy SSR  
(Photoconductivity) (Cadmium sulfide)  
(Cadmium selenide) (Gamma rays)

KAVETSKIY, A.S.

[Blood transfusion in rural hospital] Kak perelivat' krov' kapliami  
v usloviakh liuboi bol'nitsy. Feldsher & akush. no.3:48 Mr '50.  
(CIML 19:1)

S/081/62/000/018/046/059  
B160/B186

AUTHOR: Kavestkiy, G. D.

TITLE: Development of a continuous method of producing poly-formaldehyde

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 18, 1962, 502, abstract 18P51 (Tr. Mosk. in-ta khim. mashinostr., v. 20, 1960, 87-94) ✓

TEXT: A continuous method of polymerizing gaseous  $\text{CH}_2\text{O}$  has been developed in order to improve the quality of polyformaldehyde (PF) and intensify the process of its production. The method consists in feeding a carefully dried (0.004%) solvent (gasoline with a boiling point of 80-120°C or petroleum ether) at a set volumetric rate into a 150 ml reaction vessel with a catalyst (diethyl ethanol amine, diphenyl amine, Ca stearate, ammonium stearate, 0.02-0.03% of the weight of the solvent), whilst monomer gaseous  $\text{CH}_2\text{O}$  is fed at a constant rate (12-16 g/lmin) from a destructive distillation column. The PF which has formed is led away through side nozzle at the top. The relationship of the PF yield and of Card 1/2

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the polymerization rate to time was ascertained. It was proved that in order to ensure a constant polymerization rate an additional 60% of catalyst has to be introduced every 15 min, and that the process slows down if the supply of catalyst is cut off. It was established that the method of polymerization here developed ensures a constant-rate process and improves the quality of the polymer. [Abstracter's note: Complete translation.] ✓

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REZNICHENKO, V.A.; TKACHENKO, V.A.; MIKELADZE, G.Sh.; KARYAZIN, I.A.;  
KOZLOV, V.M.; NADIRADZE, Ye.M.; SOLOV'YEV, V.I.; GOGORISHVILI,  
B.P.; Prinimali uchastiye: PKHAKADZE, Sh.S.; METREVELI, A.I.;  
CHIKASHUA, D.S.; KHROMOVA, N.V.; KAVETSKIY, G.D.; TSKHVEDIANI,  
R.N.; ARABIDZE, T.V.

Making titanium slag in an electric closed reduction furnace.  
Titan i ego splavy no.8:28-40 '62. (MIRA 16:1)  
(Titanium—Electrometallurgy)

KAVETSKIY, G.D.; PLANOVSKIY, A.N.; AKOPYAN, L.A.

Calculating the longitudinal mixing of gas and solid granular  
material in a packed tower. Khim. prom. no. 6:449-453 Je '63.  
(MIRA 16:8)  
(Packed towers)

KAVETSKIY, G.D.; PLANOVSKIY, A.N.

Flow of a solid granular material in an ascending stream of gas in  
packed columns. Khim.i tekhn. i masel 7 no.11:8-12 N '62.  
(MIRA 15:12)

1. Moskovskiy institut khimicheskogo mashinostroyeniya.  
(Granular materials) (Packed towers)

KAVETSKIY, G.D.; AKOPYAN, L.A.

Effect of the design of a gas distribution device on the  
concentration of the solid phase in a packed column. Khim.  
i tekhn. topl. i masei 8 no.10:4-6 0 '63. (MIRA 16:11)

1. Moskovskiy institut khimicheskogo mashinostroyeniya.

GORENBEYN, Yu.Ya. [Morenbein, IU.IA.]; KAVETS'KIY, M.S. [Kavets'kyi, M.S.]

Determining the decomposition voltage of molten salts in  
graphite crucible blocks. Nauk. pratsi UASHN 17 no.12:167-  
169 '60. (MIRA 16:7)

(Electrolysis) (Fused salts)

